

# LCM, RNA isolation and amount of cDNA after 2 rounds of T7 amplification Figure 1A

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	Case 1	ie 1	Cas	Case 2	Cas	Case 3	Cas	Case 4	Ca	Case 5
	Normal	Cancer								
Number of LCM shots	48,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Approx # of cells	200,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000
Approx amt of RNA used for T7 amp	100ng	75ng	100ng	120ng	100ng	115ng	100ng	100ng	100ng	100ng
ds-cDNA amt after 2	8.75ug	5.88ug	1.56ug	6.88ug	2.5ug	2.97ug	23.5ug	6.0ug	17.74ug	23.13ug
rounds of T7 amp										

Amount of ds-cDNA after 2 rounds of T7 amplification is dependent on the quality of the LCM-generated RNA from the normal and tumor tissues

Precent transcripts detected in normal and tumor tissues Figure 1B

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	Cas	ase 1	Car	Case 2	Cas —	Case 3	Cas	Case 4	Case	se 5
•.	Normal	Cancer	Normal	Cancer	Normal	Vormal Cancer	Normal	lormal Cancer	Normal	Cancer
% Genes										
detected	25.8	30.3	30.3	33.0	29.4	30.3	35.3	35.8	40.3	40.2

#### D9SDO16.G1G7GE

Figure 2A: 39 Genes whose expression changed in 5/5 cases

		<u>Chromosome</u> <u>Localization</u>	Oral Cancer Association	<u>References</u>
Accession Number	Name	The state of the s	remaining the state of the stat	
Increase in Tumor				
D86983	p53-responsive gene 2	2pter-p25.1	Yes	(Yeudall et al., 1997)
J03040	Secreted protein, acidic, cysteine-rich,osteonectin	5q31.3-q32	Yes	(Porte et al., 1998)
M11147	Ferritin, light polypeptide	19q13.3-q13.4	Yes	(Kimura et al., 2000)
X12451	Cathepsin L	9q21-q22	Yes	(Kawamata et al., 1997; Strojan et al., 2000)
X17042	Proteoglycan 1, secretory granule	10q22.1		
X54925	Matrix metalloproteinase 1 (interstitial collagenase)	11q22.3	Yes	(Magary et al., 2000)
Z29083	574 oncofetal trophoblast glycoprotein	9		
D43968	Runt-related transcription factor 1 (acute myeloid leukemia 1)	21q22.23		
X02761	Fibronectin 1	2q34	Yes	(Mighell et al., 1997)
274616	Collagen, type I, alpha 2	7q22.1		10
X57579	Inhibin, beta A (activin A, activin AB alpha polypeptide)	7p15-p13		
M30257	Vascular cell adhesion molecule 1	1p32-p31	Yes	(Liu et al., 1999)
M55998	Human alpha-1 collagen type I gene,	N/A		
X65965	Superoxide dismutase 2, mitochondrial	6q25.3	Yes	(Kurokawa et al., 1998; Muramatsu et al., 1995)
X54489	GRO1 oncogene (melanoma growth stimulating activity, alpha)	4q21	Yes	(Loukinova et al., 2000)
L13923	Fibrillin 1 (Marfan Syndrome)	15q21.1		
Decrease in Tumor	Name			
X78932	Zinc finger protein 273	N/A		
J04469	Creatine kinase, mitochondrial 1 (ubiquitous)	15q15	Yes	(Lin & Chen, 1991)
L05779	Epoxide hydrolase 2, cytoplasmic	8p21-p12	Yes	(Janot et al., 1993)
M32402	Placental protein 11 (serine proteinase)	12q13.1		
M69177	Monoamine oxidase B	Xp11.4-p11.3		

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U17077	BENE protein	2q13	
U34252	Aldehyde dehydrogenase 9 (gamma-aminobutyraldehyde	1q22-q23	

Decrease in	Name			
Tumor (Cont)				
U46689	Aldehyde dehydrogenase 10 (fatty aldehyde dehydrogenase)	17p11.2		
U67963	Lysophospholipase-like	3		
U83115	Absent in melanoma 1	6q21		
U90902	Human clone 23612	N/A		
X07695	Keratin 4	12q13	Yes	(Suo et al., 1993)
969Z0X	Keratin 15	17q21	Yes	(Viaene & Baert, 1995)
X76029	Neuromedin U	4q12		
X76180	Sodium channel, nonvoltage-gated 1 alpha	12p13		
X78549	Protein tyrosine kinase 6	20q13.3		
Y09267	Flavin containing monooxygenase 2	1q23-q251		
Y09616	Carboxylesterase 2 (intestine, liver)	16		
Y07909	Epithelial membrane protein 1	12p12.3		
X53296	Interleukin 1 receptor antagonist	2q14.2	Yes	(von Biberstein et al., 1996)
M61855	Cytochrome P450, subfamily IIC (mephenytoin4-hydroxylase), polypeptide 9	10q24	Yes	(Murray et al., 1994)
U18934	TYRO3 protein tyrosine kinase	15q15.1-q21.1		

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Figure 2B: Representative sample of differentially regulated genes

Accession Number	Description/Function	Chromosomal Location	Altered Regulation
Metastatic/Invasion	7		
Pathway			
X12451	Cathepsin-L	9q21-22	Up 5/5
X54925	Collagenase/MMP I	11q22.3	Up 5/5
X02419	UPA	10q24	Up 5/5
Z29083	5T4 Oncofetal protein	6q13-14	Up 5/5
Transcriptional	7		
factors			
D43968	Runt-related transcription factor/AML1	21q22	Up 5/5
U85658	ERF1 transcription factor	20q13.2	Down 4/5
Onco-	7		
genes/suppressors			
M57731	Gro-Beta Oncogene	4q12-13	Up 4/5
M16038	Lyn-tyrosine kinase (oncogene LYN)	8q13	Up 4/5
L13698	Gas-1	9q21.3-22.1	Up 4/5
	Tumour associated membrane protein (control		
Y07909	cell-Cekk interactions & cell proliferation)	12p12.3	Down 5/5
X98311	CEA2 (onco-suppressor)	19q13.2	Down 5/5
M16750	PIM-1-oncogene	6p21.2	Down 4/5
U83115	AIM1 (onco-suppressor)	6q21	Down 4/5
Differentiation	]		
Markers	J		
X07695	Cytokeratin 4	12q13	Down 5/5
X07696	Cytokeratin 15	17q21	Down 5/5
M98447	Transglutaminase 1	14q11.2	Down 5/5
Others			
U37546	Apoptosis-inhibitor protein	11q22-23	Up 5/5
X76029	Neuromedin U	4q12	Down 5/5
S45630	Alpha-beta-crystallin/Rosenthal protein	11q22.3-23.1	Down 4/5
X78932	ZFP HZF9 (potent repressor)	19p12	Down 5/5
U47414	Cyclin G2 (cell cycle regulators)	4q21	Down 4/5

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#### Figure 2C UP REGULATED GENES

Probe set	Description	Ave FC	Method*	T-test
X54925	MMP1, type I interstitial collagenase	429	G	0.093
X05232	MMP3, stromelysin-1	177	G	0.047
X57579	Activin β-A subunit	146	G	0.066
U24577	LDL-phospholipase A2	133	G	0.003
X54489	Melanoma growth stimulatory activity	93	G M Gc	0.040
L23808	MMP12	70	G	0.060
X04602	Interleukin BSF-2	59	G	0.256
U20758	Osteopontin, SPP1	47	G	0.224
M21121	T cell-specific protein, RANTES	40	G	0.129
U09278	Fibroblast activation protein	39	G	0.087
X51441	Serum amyloid A, SAA	39	G	0.037
M63438	Immunoglobulin kappa variable 1D-8	35	G	0.071
Z19574	Cytokeratin 17	34	G	0.125
Z49194	Oct-binding factor	28	G Gc	0.081
U28488	Complement component 3a receptor 1	25	G	0.006
V00536	IFN-γ	24	G	0.150
X02761	Fibronectin	21	G	0.115
J03040	Osteonectin / SPARC	20	Gc	0.227
D55696	Cysteine protease	19	Gc	0.022
X52022	Collagen, type VI α3	18	G	0.202
U89942	Lysyl oxidase-related protein	18	Gc G	0.082
M12759	lg J chain	18	G	0.218
L13286	1,25-dihydroxyvitamin D3 24-hydroxylase	e 17	Gc G	0.052
X66867	Max	16	Gc	0.304
J05070	MMP9, type IV collagenase	16	G	0.287
M87789	IGHG3, Ig heavy constant γ 3	16	G	0.102
X54867	NKG2, lectin-like receptor subfamily C	14	G	0.171
M13755	Interferon induced 17KDa/15KDa	13	G	0.052

<sup>\*</sup>G=GeneChip, M=Matlab, Gc=GeneCluster

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Figure 2D DOWN REGULATED GENES

Probe set	Description		Method*	T-test
X51420	Tyrosinase-related protein	0.06	M	0.202
X07695	Cytokeratin 4C	0.06	GM	0.002
U09578	MAPKAP kinase	0.08	M	0.238
Z84721	Globin, $\alpha$ and $\zeta$	0.08	M	0.036
M32402	Placental protein, PP11	0.10	GM	0.005
HG3884-HT4154	Homeotic Protein, Hpx-42	0.10	G	0.006
U85707	Leukemogenic homolog protein, MEIS1	0.10	GM	0.008
X76180	Ung amiloride sensitive Na+ channel protein	0.10	G M	0.011
Y09267	Flavin-containing monooxygenase 2	0.10	M	0.036
X95240	Cysteine-rich secretory protein 3	0.10	M	0.141
X07696	Cytokeratin 15	0.11	GM	0.004
X76223	MAL, t cell differentiation protein	0.11	GM	0.041
U49114	Prohormone convertase 5 precursor, PC5	0.14	M	0.102
D13643	KIAA0018	0.14	Gc	0.001
U65932	Extracellular matrix protein 1, ECM1	0.14	M	0.048
M25079	Sickle cell β-globin	0.14	M	0.085
M83186	Cytochrome c oxidase subunit VIIa	0.14	M	0.036
D00408	Cytochrome P-450, fetal liver	0.14	G M Gc	0.022
M27160	Tyrosinase, TYR	0.15	M	0.085
X87159	Epithelial amiloride-sensitive Na+ channel, β	0.15	G	0.003
Y07909	Progression Associated Protein	0.15	M	0.004
X76029	Neuromedin U	0.15	G M Gc	0.000
D29958	KIAA0116	0.15	Gc	0.050
U06643	Keratinocyte lectin 14, HKL-14	0.15	M Gc	0.001
X53296	IRAP	0.16	GM	0.012
U15932	Protein phosphatase	0.16	M	0.045
HG4236-HT4506	Zinc Finger Protein, Znf138	0.16	G	0.079
D80010	KIAA0188	0.17	M	0.000

<sup>\*</sup>G=GeneChip, M=Matlab, Gc=GeneCluster



	Samples	-	2	3	4	5
Accession		GC/RTQPCR	GC/RTQPCR	GC/RTOPCR GC/RTOPCR GC/RTOPCR GC/RTOPCR	GC/RTQPCR	GC/RTQPCR
X54925	රී	4300 / 1100	22900 / 36800	800 / 2200	49500 / 130000	7800 / 16500
X12451	X12451 Pro-cathepsin L	300 / 800	570 / 700	180 / 300	300 / 2800	300 / 400
X02419	UPA	400 / 100	440 / 800	150 / 3200	400 / 980	425 / 900
_						

GC= Gene expression data RT-QPCR= real time quantitative PCR

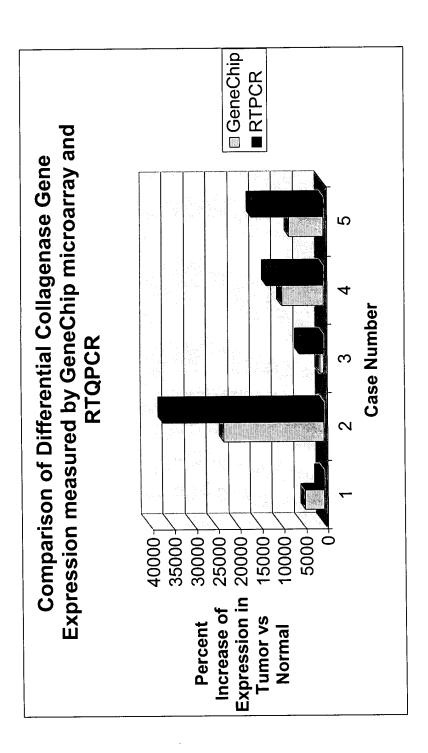


Figure 4

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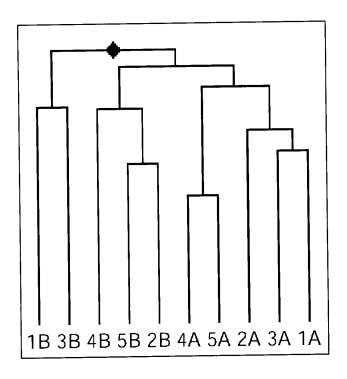


Figure 5

### CSSCOIS CICYDE

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# Figure 6: Differentially Expressed Genes Identified by All 3 Methods

Accession Number	Name	Expression Up/Down in Oral Cancer	Chromosome Localization	Oral Cancer Association	References
D00408	Cytochrome P450, subfamily IIIA polypeptide 7	See Comment 1	QN		
D13666	Osteoblast specific factor 2	Up in Cancer	13		
D42047	KIAA0089	Down in Cancer	က		
D43968	Runt-related transcription factor 1	Up in Cancer	21q22.3		
D84276	CD38 antigen (p45)	Up in Cancer	4p15		
HG3494-HT368	HG3494-HT3688 Nuclear Protein IL6	Up in Cancer	QN	Yes	(Ondrey et al., 1999)
J03258	Vitamin D receptor	Down in Cancer	12q12-q14	Yes	(Lotan, 1997)
J03473	ADP-ribosyltransferase	Up in Cancer	1q41-q42		
103909	Interferon, gamma inducible protein 30	Up in Cancer	19p13.1		
J04080	Complement component 1, s subcomponent	Up in Cancer	12p13		
M14200	Diazepam binding inhibitor	Down in Cancer	2q12-q21		
M15661	Ribosomal protein L36a	Down in Cancer	14		
M34309	v-erb-b2 avian erythroblastic leukemia viral oncogene homolog3	Down in Cancer	12q13	Yes	(Shintani et al., 1995)
M69177	Monoamine oxidase B	Down in Cancer	Xp11.4-p11.3		
M81182	ATP-binding cassette, subfamily D	Down in Cancer	1p22-p21		
S45630	Crystallin, alpha B	Down in Cancer	11q22.3-q23.1		
U18934	TYRO3 protein tyrosine kinase	Down in Cancer	15q15.1-q21.1		
U34252	Aldehyde dehydrogenase 9	Down in Cancer	1q22-q23		
U46689	Aldehyde dehydrogenase 10	Down in Cancer	17p11.2		
U56814	Deoxyribonuclease I-like 3	Down in Cancer	3p21.1-p14.3		
X12451	Cathepsin L	Up in Cancer	9q21-q22	Yes	(Kawamata et al., 1997; Strojan et al., 2000)
X54489	GRO1 oncogene (MGSA)	Up in Cancer	4q21	Yes	(Loukinova et al., 2000)
X76029	Neuromedin U	Down in Cancer	4q12		
X78932	Zinc finger protein 273	Down in Cancer	QN		
X87241	FAT tumor suppressor	Up in Cancer	4q34-q35		
Y00815	Protein tyrosine phosphatase, receptor, type, F	Down in Cancer	1q34	Yes	
Z29083	5T4 oncofetal trophoblast glycoprotein	Up in Cancer	9		
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#### FIGURE 7

"D00408, class B, 11 probes, 11 in D00408 1373-1921, Human fetal liver cytochrome P-450 (P-450 HFLa), complete cds, Human fetal liver cytochrome P-"D28915, class A, 20 probes, 16 in D28915cds 1002-1272: 4 in reverseSequence, 114-186, Human gene for hepatitis C-associated microtubular aggregate "AF008445, class A, 20 probes, 20 in AF008445 895-1387, Homo sapiens phospholipid scramblase mRNA, complete cds. /gb=AF008445 /ntype=RNA" "D00003, class B, 12 probes, 12 in D00003 1681-1981, Human liver cytochrome P-450 mRNA, complete cds, Human liver cytochrome P-450 mRNA, "AB000115, class A, 20 probes, 20 in AB000115 1469-1973, Human mRNA, complete cds" at "AC002115, class A, 20 probes, 16 in AC002115mRNA#2 3349-7559: 4 not in GB record, COX6B gene (COXG) extracted from Human DNA from "D43968, class A, 20 probes, 20 in D43968 6790-7222, Human AML1 mRNA for AML1b protein (alternatively spliced product), complete cds." "D49387, class A, 20 probes, 20 in D49387 401-917, Human mRNA for NADP dependent leukotriene b4 12-hydroxydehydrogenase, partial cds. "D32129, class A, 20 probes, 20 in D32129 920-1425, Human mRNA for HLA class-I (HLA-A26) heavy chain, complete cds (clone cMIY-1)" "D11151, class A, 20 probes, 20 in D11151exon 1936-2434, Human DNA for endothelin-A receptor, 5' flanking region and" "D12775, class A, 20 probes, 20 in D12775 3124-3662, Human mRNA for erythrocyte-specific AMP deaminase, complete cds" "D13644, class A, 20 probes, 20 in D13644 4013-4523, Human mRNA for KIAA0019 gene, complete cds" overlapping chromosome 19 cosmids R31396, F25451, and R31076 containing COX6B and UPKA, genomic sequence, COX6B gene (COXG) e" "D14520, class A, 20 probes, 20 in D14520 718-1258, Human mRNA for GC-Box binding protein BTEB2, complete cds" "D13666, class A, 20 probes, 20 in D13666 2630-3072, Homo sapiens mRNA for osteoblast specific factor 2 (OSF-20s)" "D43682, class A, 20 probes, 20 in D43682 1584-2115, Human mRNA for very-long-chain acyl-CoA dehydrogenase "AB000114, class A, 20 probes, 20 in AB000114 1818-2208, Human mRNA for osteomodulin, complete cds" "D38551, class A, 20 probes, 20 in D38551 3082-3592, Human mRNA for KIAA0078 gene, complete cds" "D31883, class A, 20 probes, 20 in D31883 6153-6711, Human mRNA for KIAA0059 gene, complete cds" "D31887, class A, 20 probes, 20 in D31887 4050-4512, Human mRNA for KIAA0062 gene, partial cds" "D14658, class A, 20 probes, 20 in D14658 859-1285, Human mRNA for KIAA0102 gene, complete cds" "D16217, class A, 20 probes, 20 in D16217 1904-2414, Human mRNA for calpastatin, complete cds" "D21255, class A, 20 probes, 20 in D21255 3362-3812, Human mRNA for OB-cadherin-2, complete cds" "D42047, class A, 20 probes, 20 in D42047 3472-3970, Human mRNA for KIAA0089 gene, partial cds" "D25304, class A, 20 probes, 20 in D25304 4431-4701, Human mRNA for KIAA0006 gene, partial cds" "D42073, class A, 20 probes, 20 in D42073 1551-2049, Human mRNA for reticulocalbin, complete cds" "D43636, class A, 20 probes, 20 in D43636 3576-4080, Human mRNA for KIAA0096 gene, partial cds" complete cds" gb=D49387 /ntype=RNA" VLCAD), complete cds" 450 (P-450 HFLa), AC002115 cds1 AF008445\_at D12775\_s\_at D13644\_at D13666\_s\_at D14520\_at D32129\_f\_at D38551\_at AB000114\_at AB000115 at complete cds" D00003 s at 043682 s at D00408 s at D42047\_at D42073\_at protein p44" D43968\_at D31883\_at D43636\_at D49387 at D11151 at D16217\_at D21255\_at D25304 at D31887 at D14658\_at D28915 at

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"D49489, class A, 20 probes, 20 in D49489 1267-1759, Human mRNA for protein disulfide isomerase-related protein P5, complete cds" "D49950, class A, 20 probes, 20 in D49950 495-918, Human Liver mRNA for interferon-gamma inducing factor(IGIF), complete cds" "D61391, class A, 20 probes, 20 in D61391 1169-1685, Human mRNA for phosphoribosypyrophosphate synthetase-associated protein 39, complete cds" "D79987, class A, 20 probes, 20 in D79987 6109-6523, Human mRNA for KIAA0165 gene, complete cds"

D49489\_at

D49950\_at

D61391 at

D79987\_at

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20 probes, 20 in D79990 5065-5383, Human mRNA for KIAA0168 gene, complete cds"

D79990 at

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"D87258, class A, 20 probes, 20 in D87258 1489-1999, Human cancellous bone osteoblast mRNA for serin protease with IGF-binding motif, complete cds" "D84276, class A, 20 probes, 18 in D84276 909-1185: 2 in reverseSequence, 1299-1305, Human mRNA for CD38, complete cds" "D85181, class A, 20 probes, 20 in D85181 1502-2018, Human mRNA for fungal sterol-C5-desaturase homolog, complete cds" "D87119, class A, 20 probes, 20 in D87119 3614-4160, Human cancellous bone osteoblast mRNA for GS3955, complete cds" "D85429, class A, 20 probes, 20 in D85429exon#3 813-1347, Human DNA for heat shock protein 40, complete cds" "D84239, class A, 20 probes, 20 in D84239 15949-16339, Human mRNA for IgG Fc binding protein, complete cds" 'D83018, class A, 20 probes, 20 in D83018 2645-3149, Human mRNA for nel-related protein 2, complete cds" "D86956, class A, 20 probes, 20 in D86956 3139-3589, Human mRNA for KIAA0201 gene, complete cds." "D86957, class A, 20 probes, 20 in D86957 3869-4265, Human mRNA for KIAA0202 gene, partial cds." "D86959, class A, 20 probes, 20 in D86959 5435-5867, Human mRNA for KIAA0204 gene, complete cds." "D86961, class A, 20 probes, 20 in D86961 3678-4188, Human mRNA for KIAA0206 gene, partial cds." "D86983, class A, 20 probes, 20 in D86983 5131-5485, Human mRNA for KIAA0230 gene, partial cds" "D86985, class A, 20 probes, 20 in D86985 5502-5946, Human mRNA for KIAA0232 gene, complete cds" "D87445, class A, 20 probes, 20 in D87445 6334-6892, Human mRNA for KIAA0256 gene, complete cds" 'D79992, class A, 20 probes, 20 in D79992 6597-6897, Human mRNA for KIAA0170 gene, complete cds" "D86974, class A, 20 probes, 20 in D86974 5077-5308, Human mRNA for KIAA0220 gene, partial cds" 'D80000, class A, 20 probes, 20 in D80000 5250-5754, Human mRNA for KIAA0178 gene, partial cds" 'D79994, class A, 20 probes, 20 in D79994 4227-4749, Human mRNA for KIAA0172 gene, partial cds" "D80010, class A, 20 probes, 20 in D80010 4778-5198, Human mRNA for KIAA0188 gene, partial cds" "Transcription Factor E4tfl, Respiratory, Gamma 2 Subunit, Alt. Splice 4" "External Membrane Protein, 130 Kda" "Decorin, Alt. Splice 1" "Globin, Beta" Macmarcks Calcyclin HG1428-HT1428 s at HG3431-HT3616 s at HG1686-HT4572 s at HG2090-HT2152 s at HG1612-HT1612 at HG2788-HT2896 at D86983\_at D86985\_at D87445 at D87119 at D87258 at 386957\_at 386961\_at D79992\_at **D83018** at D84239 at D84276 at D85181 at 385429 at 386956 at 386959 at D86974\_at D79994 at D80000 at D80010 at

"100277, class C, 20 probes, 20 in all\_100277 3607-3724, Human (genomic clones lambda-[SK2-T2, HS578T]; cDNA clones RS-[3,4, 6]) c-Ha-ras1 proto-"J02871, class A, 20 probes, 20 in J02871 1475-1931, Human lung cytochrome P450 (IV subfamily) BI protein, complete cds" "J03040, class A, 20 probes, 20 in J03040 1508-2000, Human SPARC/osteonectin mRNA, complete cds" "J03077, class A, 20 probes, 20 in J03077 2159-2692, Human co-beta glucosidase (proactivator) mRNA, complete cds" "103473, class A, 20 probes, 20 in J03473mRNA 3212-3752, Human poly(ADP-ribose) synthetase mRNA, complete cds" "J03258, class A, 20 probes, 20 in J03258mRNA 4003-4561, Human vitamin D receptor mRNA, complete cds" "Major Histocompatibility Complex, Class I, C" oncogene, complete coding sequence" HG658-HT658\_f\_at 102871\_s\_at 103077\_s\_at J03258\_at 100277 at 103040 at

"Small Nuclear Ribonucleoprotein U1, 1snrp"

Protein Phosphatase Inhibitor Homolog

Nuclear Factor Nf-I16

HG3494-HT3688\_at HG3570-HT3773\_at HG4297-HT4567\_at

Transcriptional Coactivator Pc4

Glycogenin

HG4334-HT4604 s at

HG4557-HT4962 at

"103827, class A, 20 probes, 20 in J03827 970-1438, Y box binding protein-1 (YB-1) mRNA"

"J03909, class A, 20 probes, 20 in J03909 461-995, Human gamma-interferon-inducible protein (IP-30) mRNA, complete cds" "103474, class A, 20 probes, 20 in J03474cds 3-255, Human serum amyloid A gene, complete cds" J03827\_at J03909\_at 103473\_at 03474\_at

#### OSSOOLE CLETCH

Applicants: Janet A. Warrington et al.
USSN: 09/950,016 Filed: September 10, 2001
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"L33842, class A, 20 probes, 20 in L33842mRNA 1213-1639, Homo sapiens (clone FFE-7) type II inosine monophosphate dehydrogenase (IMPDH2) gene,
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"L08895, class C, 20 probes, 20 in all L08895 3518-4059, Homo sapiens MADS/MEF2-family transcription factor (MEF2C) mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "L10678, class A, 20 probes, 20 in L10678 1128-1650, Human profilin II mRNA, complete cds"
"L10717, class A, 20 probes, 20 in L10717 6303-6332, Homo sapiens T cell-specific tyrosine kinase mRNA, complete cds"
"L11370, class A, 20 probes, 20 in L11370 3486-4038, Human protocadherin 42 mRNA, complete cds for abbreviated PC42"
"L113710, class A, 20 probes, 20 in L11371 1454-1644, Human rytosolic serine hydroxymethyltransferase (SHMT) mRNA, complete cds"
"L11336, class A, 20 probes, 20 in L13286 2671-3205, Human intochondrial 1,25-dihydroxyvitamin D3 24-hydroxylase mRNA, complete cds"
"L13286, class A, 20 probes, 20 in L1329exon 434-938, Homo sapiens iduronate-2-sulfatase (IDS) gene"
"L13391, class A, 20 probes, 20 in L13391 exon#5 265-808, Human helix-loop-helix basic phosphoprotein (G0S8) gene, complete cds"
"L13923, class A, 20 probes, 20 in L13923 9109-9601, Homo sapiens fibrillin mRNA, complete cds"
"L18373, class A, 20 probes, 20 in L19437 7335-7839, Human transaldolase mRNA containing transposable element, complete cds"
"L18837, class A, 20 probes, 20 in L19437 857-1211, Human transaldolase mRNA containing transposable element, complete cds"
"L1837, class A, 20 probes, 20 in L19437 857-1211, Human transaldolase mRNA containing transposable element, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                         "104469, class B, 20 probes, 11 in J04469exon#9 11-173: 9 not in GB record, Human mitochondrial creatine kinase (CKMT) gene, complete cds"
"J05070, class A, 20 probes, 20 in J05070 1805-2303, Human type IV collagenase mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "L24203, class A, 20 probes, 20 in L24203 2423-2891, Homo sapiens ataxia-telangicctasia group D-associated protein mRNA, complete cds"
                                                                                                                                                "104093, class A, 20 probes, 20 in J04093 1842-2342, Homo sapiens phenol UDP-glucuronosyltransferase (UDPGT) mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "L05187, class C, 20 probes, 20 in all L05187 2284-2339, Homo sapiens small proline-rich protein 1 (SPRR1A) gene, complete cds" "L05779, class A, 20 probes, 20 in L05779 1535-2069, Human cytosolic epoxide hydrolase mRNA, complete cds"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "L06797, class A, 20 probes, 20 in L06797 1041-1599, Human (clone L5) orphan G protein-coupled receptor mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "L33930, class A, 20 probes, 20 in L33930 1504-2054, Homo sapiens CD24 signal transducer mRNA, complete cds and 3' region"
                                          "104076, class A, 20 probes, 20 in J04076mRNA 2171-2651, Human early growth response 2 protein (EGR2) mRNA, complete cds"
                                                                                                                                                                                                              "J04130, class A, 20 probes, 20 in J04130mRNA 87-634, Human activation (Act-2) mRNA, complete cds" "J04162, class A, 20 probes, 20 in J04162mRNA 1406-1940, Human leukocyte IgG receptor (Fc-gamma-R) mRNA, complete cds" "J04164, class A, 20 probes, 20 in J04164 366-804, Human interferon-inducible protein 27-Sep mRNA, complete cds" "
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "L10386, class A, 20 probes, 20 in L10386 2036-2498, Homo sapiens transglutaminase E3 (TGASE3) mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "L23116, class A, 20 probes, 20 in L23116 3296-3644, Homo sapiens galactocerebrosidase (GALC) mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                          "104177, class A, 20 probes, 20 in J04177 5773-6133, Human alpha-1 type XI collagen (COL11A1) mRNA, complete cds"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 probes, 20 in L32179mRNA 1028-1556, Human arylacetamide deacetylase mRNA, complete cds"
                                                                                                     "104080, class A, 20 probes, 20 in J04080mRNA 2136-2604, Human complement component C1r mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "L23808, class A, 20 probes, 20 in L23808 1297-1717, Human metalloproteinase (HME) mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "105633, class A, 20 probes, 20 in J05633 2714-3008, Human integrin beta-5 subunit mRNA, complete cds"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "K03430, class C, 20 probes, 20 in all K03430 414-853, Human complement C1q B-chain gene" "L00352, class A, 20 probes, 20 in L00352exon 1952-2492, Human low density lipoprotein receptor gene"
J04056, class A, 20 probes, 20 in J04056 746-1118, Human carbonyl reductase mRNA, complete cds"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "L10373, class A, 20 probes, 20 in L10373 1311-1713, Human (clone CCG-B7) mRNA sequence"
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L06895_at
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L13391_at
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L14837_at
L19437_at
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L11931_at
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L13286_at
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J04469_at
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"M18728, class A, 20 probes, 20 in MI8728mRNA 1932-2460, Human nonspecific crossreacting antigen mRNA, complete cds" "M18737, class A, 20 probes, 20 in M18737mRNA 269-815, GJA1P1 gene extracted from Human Hanukah factor serine protease (HuHF) mRNA, complete "M19720, class A, 20 probes, 20 in MI9720mRNA#2 2659-3217, L-myc gene (L-myc protein) extracted from Human L-myc protein gene, complete cds, L-"L34657, class A, 20 probes, 20 in L34657mRNA 2757-3219, Homo sapiens platelet/endothelial cell adhesion molecule-1 (PECAM-1) gene"
"L76465, class A, 20 probes, 20 in L76465 1929-2493, Homo sapiens NAD+-dependent 15 hydroxyprostaglandin dehydrogenase (PGDH) mRNA, complete "M19888, class A, 20 probes, 20 in M19888 58-580, Human small proline rich protein (sprI) mRNA, clone 128"
"M21121, class A, 20 probes, 20 in M2131 958-1129, Human T cell-specific protein (RANTES) mRNA, complete cds"
"M21389, class A, 20 probes, 20 in M21389mRNA 1754-2192, Human ras-related protein (Krev-I) mRNA, complete cds"
"M22995, class A, 20 probes, 20 in M22995 1008-1542, Human beta-hexosaminidase beta-subunit (HEXB) gene"
"M23294, class A, 20 probes, 20 in M23294mRNA#1 1219-1651, Human beta-hexosaminidase beta-subunit (HEXB) gene"
"M24194, class A, 20 probes, 20 in M24194mRNA 504-1023, Human MHC protein homologous to chicken B complex protein mRNA, complete cds"
"M24194, class A, 20 probes, 20 not in GB record, PTHLH gene (parathyroid hormone-like protein A) extracted from Human parathyroid hormone-like "M19045, class A, 20 probes, 20 in M19045 907-1414, Human lysozyme mRNA, complete cds"
"M19481, class C, 20 probes, 14 in all\_M19481 278-651: 6 in M19481cds 818-921, Human follistatin gene"
"M19481, class C, 20 probes, 20 in all\_M19645 4941-5470, Human 78 kdalton glucose-regulated protein (GRP78) gene, complete cds" "M13755, class A, 20 probes, 20 in M13755mRNA 33-591, Human interferon-induced 17-kDa/15-kDa protein mRNA, complete cds" "M15661, class A, 20 probes, 20 in M15661mRNA 3-338, Human ribosomal protein mRNA, complete cds" "M15841, class A, 20 probes, 20 in M15841 492-945, Human U2 small nuclear RNA-associated B" antigen mRNA, complete cds" "M16038, class A, 20 probes, 20 in M16038 1817-2255, Human lyn mRNA encoding a tyrosine kinase"
"M16750, class A, 20 probes, 20 in M16750 1699-2210, Human pim-1 oncogene mRNA, complete cds"
"M17183, class C, 20 probes, 20 in all\_M17183 531-752, Human parathyroid hormone-related protein mRNA, complete cds" "M14200, class A, 20 probes, 20 in M14200mRNA 139-469, Human diazepam binding inhibitor (DBI) mRNA, complete cds" "M12759, class B, 20 probes, 12 in M12759cds 65-335: 8 in reverseSequence, 1020-1260, Human Ig J chain gene" "L77886, class A, 20 probes, 20 in L77886 5390-5696, Human protein tyrosine phosphatase mRNA, complete cds" "M11147, class A, 20 probes, 20 in M11147mRNA 251-689, Human ferritin L chain mRNA, complete cds" "M11718, class A, 20 probes, 20 in M11718 716-1274, Human alpha-2 type V collagen gene, 3' end" "M14199, class A, 20 probes, 20 in M14199 2-381, Human laminin receptor (2H5 epitope) mRNA, 5' end" "M14338, class C, 20 probes, 20 in all\_M14338 2740-3281, Human mRNA for protein S and intron" myc gene (L-myc protein) extracted from Human L-myc protein gene, complete cds" at M14200\_mal\_at M18737\_mal\_at M19720 ma2 M19045\_f\_at M16750\_s\_at M17183\_s\_at M14199\_s\_at M21121\_at M22995\_at M23294\_at M19481\_at M19645 at M21389\_at M24194 at M18728\_at M19888\_at M11147\_at M11718\_at M15841\_at M16038 at M14338 at M15661\_at M12759 at M13755 at L77886\_at .76465 at ,34657 at

"M27160, class A, 20 probes, 20 in M27160mRNA 1441-1879, Human tyrosinase (TYR) mRNA, complete cds" collagen type IV gene"

M26576\_cds2\_at "M26576, class B, 20 probes, 10 in M26576exon 43-289. 10 not in GB record, COL4A1 gene (alpha-1 type IV collagen) extracted from Human alpha-1

"M26311, class A, 19 probes, 19 in M26311 27-504, Human cystic fibrosis antigen mRNA, complete cds."

M25079\_s\_at

M24486\_s\_at

M24594 at M24902 at

M24351\_cds3\_s\_at "M24351, class A, 20 probes, 20 in M24351exon 248-404, PTHLH gene (parathyroid hormone-like protein A) extracted from Human parathyroid hormone-

protein (PLP) gene, PTHLH gene (parathyroid hormone-like protein A) extracted from Human parathyroid hormone-lik"

like prot $\overline{ ext{ein}}$  (P $\overline{ ext{LP}}$ ) gene, PTHLH gene (parathyroid hormone-like protein A) extracted from Human parathyroid hormon"

"M24486, class A, 20 probes, 20 in M24486mRNA 2110-2684, Human prolyl 4-hydroxylase alpha subunit mRNA, complete cds, clone PA-11"

"M24594, class A, 20 probes, 20 in M24594mRNA 1077-1593, Human interferon-inducible 56 Kd protein mRNA, complete cds"

"M24902, class A, 20 probes, 20 in M24902mRNA 2694-3018, Human prostatic acid phosphatase mRNA, complete cds" "M25079, class A, 20 probes, 20 in M25079 163-230, Human sickle cell beta-globin mRNA, complete cds"

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"M30818, class A, 20 probes, 20 in M30818mRNA 2384-2888, Human interferon-induced cellular resistance mediator protein (MxB) mRNA, complete cds" "M35878, class A, 20 probes, 20 in M35878exon#4 1993-2443, Human insulin-like growth factor-binding protein-3 gene, complete cds, clone HL1006d"
"M36341, class A, 20 probes, 20 in M36341 912-1458, Human ADP-ribosylation factor 4 (ARF4) mRNA, complete cds"
"M37721, class A, 20 probes, 20 in M37721 3297-3705, Human peptidylglycine alpha-amidating monooxygenase mRNA, complete cds"
"M37724, class A, 20 probes, 20 in M37766 475-955, Human MEM-102 glycoprotein mRNA, complete cds"
"M35542, class A, 20 probes, 20 in M55542mRNA 2310-2802, Human guanylate binding protein isoform I (GBP-2) mRNA, complete cds"
"M55998, class C, 20 probes, 20 in M57710 355-865, Human alpha-1 collagen type I gene, 3' end"
"M57710, class A, 20 probes, 20 in M57731mRNA 617-1032, Human gro-beta mRNA, complete cds"
"M57731, class A, 20 probes, 20 in M57731mRNA 617-1032, Human tumor necrosis factor alpha inducible protein A20 mRNA, complete cds"
"M59465, class A, 20 probes, 20 in M59465 3867-4341, Human tumor necrosis factor alpha inducible protein A20 mRNA, complete cds" "M34516, class C, 11 probes, 11 in all\_M34516 426-469, Human omega light chain protein 14.1 (Ig lambda chain related) gene, Human omega light chain "M77349, class A, 20 probes, 20 in M77349 2102-2642, Human transforming growth factor-beta induced gene product (BIGH3) mRNA, complete cds" "M33764, class B, 20 probes, 12 in M33764cds 1158-1350: 8 in reverseSequence, 7989-8235, Human ornithine decarboxylase gene, complete cds" "M31642, class A, 20 probes, 20 in M31642mRNA 802-1288, Human hypoxanthine phosphoribosyltransferase (HPRT) mRNA, complete cds" "M34057, class A, 20 probes, 20 in M34057 4720-5044, Human transforming growth factor-beta 1 binding protein mRNA, complete cds" "M34309, class A, 20 probes, 20 in M34309 4410-4836, Human epidermal growth factor receptor (HER3) mRNA, complete cds" "M34423, class A, 20 probes, 20 in M34423 1856-2312, Human beta-galactosidase (GLB1) mRNA, complete cds" 'M81182, class A, 20 probes, 20 in M81182 2831-3314, Homo sapiens peroxisomal 70 kD membrane protein mRNA, complete cds" "M63438, class A, 17 probes, 17 in M63438 794-1195, Human Ig rearranged gamma chain mKNA, V-J-C region and complete cds" "M64082, class A, 20 probes, 20 in M64082 1605-2055, Human flavin-containing monooxygenase (FMO1) mRNA, complete cds" "M64347, class A, 20 probes, 20 in M64347 3336-3720, Human novel growth factor receptor mRNA, 3' cds" "M69181, class A, 20 probes, 20 in M69181 6995-7523, Human nonmuscle myosin heavy chain-B (MYH10) mRNA, partial cds." "M32011, class A, 20 probes, 20 in M32011mRNA 1623-2157, Human neutrophil oxidase factor (p67-phox) mRNA, complete cds" "M64929, class A, 20 probes, 20 in M64929 1572-2100, Human protein phosphatase 2A alpha subunit mRNA, complete cds" "M65292, class A, 20 probes, 20 in M65292 667-1202, Human factor H homologue mRNA, complete cds" "M76482, class A, 20 probes, 20 in M76482 2855-3251, Human 130-kD pemphigus vulgaris antigen mRNA, complete cds" "M63256, class A, 20 probes, 20 in M63256 1975-2497, Human major Yo paraneoplastic antigen (CDR2) mRNA, 3' end" "M61853, class C, 20 probes, 20 in all\_M61853 1735-2240, Human cytochrome P4502C18 (CYP2C18) mRNA, clone 6b" "M69177, class A, 20 probes, 20 in M69177 1992-2436, Human monoamine oxidase B (MAOB) mRNA, complete cds" "M29540, class A, 20 probes, 20 in M29540 2616-2949, Human carcinoembryonic antigen mRNA (CEA), complete cds" "M30257, class A, 20 probes, 20 in M30257 2214-2709, Human vascular cell adhesion molecule 1 mRNA, complete cds" "M31627, class A, 20 probes, 20 in M31627 1191-1725, Human X box binding protein-1 (XBP-1) mRNA, complete cds" "M61855, class C, 20 probes, 20 in all\_M61855 1535-1714, Human cytochrome P4502C9 (CYP2C9) mRNA, clone 25" "M32402, class A, 20 probes, 20 in M32402mRNA 1851-2253, Human placental protein (PP11) mRNA, complete cds" "M62982, class A, 20 probes, 20 in M62982 1795-2299, Human arachidonate 12-lipoxygenase mRNA, complete cds" "M31994, class C, 20 probes, 20 in all\_M31994 117-538, Human cytosolic aldehyde dehydrogenase (ALDH1) gene" "M61906, class A, 20 probes, 20 in M61906 2813-3326, Human P13-kinase associated p85 mRNA sequence" "M31551, class C, 20 probes, 20 in all\_M31551 576-1134, Human urokinase inhibitor (PAI-2) gene" "M33882, class A, 20 probes, 20 in M33882 2348-2762, Human p78 protein mRNA, complete cds" 'M63835, class A, 20 probes, 20 in M63835mRNA 896-1388, Human IgG Fc receptor I gene" 'M29064, class A, 20 probes, 20 in M29064 1225-1657, Human hnRNP B1 protein mRNA" protein 14.1 (Ig lambda chain related) gene" M81182\_s\_at M65292 s at M63438\_s\_at M31551\_s\_at M31627\_at M31642\_at M31994\_at M55998\_s\_at M57731\_s\_at M64347\_at M64929\_at M77349\_at M34516 r at M59465\_at M61853\_at M63835\_at M69177\_at M69181 at M35878\_at M36341\_at M37721\_at M61906\_at M64082 at M76482 at M61855\_at M62982\_at M63256 at M55542\_at M57710 at M30257\_s\_at M34057\_at M34309\_at M37766\_at M32011\_at M32402\_at M34423 at M33764\_at M33882\_at M30818 at M29540 at

### OSSIBLE BLOYDE

"M93036, class A, 20 probes, 18 in M93036mRNA 987-1353: 2 in reverseSequence, 527-545, Human (clone 21726) carcinoma-associated antigen GA733-2 "M87789, class A, 20 probes, 20 in M87789 1021-1512, Human (hybridoma H210) anti-hepatitis A IgG variable region, constant region, complementarity-"S74017, class A, 20 probes, 20 in S74017 1721-2213, Nrf2=NF-E2-like basic leucine zipper transcriptional activator [human, hemin-induced K562 cells, "S73591, class A, 20 probes, 20 in S73591 2169-2649, brain-expressed HHCPA78 homolog [human, HL-60 acute promyelocytic leukemia cells, mRNA, "S69232, class A, 20 probes, 20 in S69232 1584-1992, electron transfer flavoprotein-ubiquinone oxidoreductase [human, fetal liver, mRNA, 2124 nt]" "M83186, class A, 20 probes, 20 in M83186 103-316, Human cytochrome c oxidase subunit VIIa (COX7A) muscle isoform mRNA, complete cds" "S62539, class A, 20 probes, 20 in S62539 5366-5756, insulin receptor substrate-1 [human, skeletal muscle, mRNA, 5828 nt]"
"S67156, class A, 20 probes, 20 in S67156 876-1368, ASP=aspartoacylase [human, kidney, mRNA, 1435 nt]"
"S68805, class A, 20 probes, 20 in S68805 1972-2305, L-arginine:glycine amidinotransferase [human, kidney carcinoma cells, mRNA, 2330 nt]" "M93426, class A, 20 probes, 20 in M93426 7455-7845, Human protein tyrosine phosphatase zeta-polypeptide (PTPRZ) mRNA, complete cds." "M96740, class A, 20 probes, 20 in M96740 2014-2476, Human NSCL-2 gene sequence." "M97935, class A, 20 probes, 20 in M97935 3412-3886, Human transcription factor ISGF-3 mRNA sequence." "M97936, class A, 20 probes, 20 in M97936 2354-2564, Human transcription factor ISGF-3 mRNA sequence." "M98447, class A, 20 probes, 20 in M98447 mRNA 2256-2670, H. sapiens keratinocyte transglutaminase gene, complete cds." "M98776, class A, 20 probes, 20 in M98776mRNA 1864-2266, Human keratin I gene, complete cds." "S45630, class A, 20 probes, 20 in S45630 108-612, alpha B-crystallin=Rosenthal fiber component [human, glioma cell line, mRNA, 691 nt]" "S74728, class A, 20 probes, 20 in S74728 1245-1773, antiquitin=26g turgor protein homolog [human, kidney, mRNA, 1809 nt]" "S78187, class A, 20 probes, 20 in S78187 2548-3064, CDC25Hu2=cdc25+ homolog [human, mRNA, 3118 nt]" "S54005, class A, 20 probes, 20 in S54005 2-197, thymosin beta-10 [human, metastatic melanoma cell line, mRNA, 453 nt]" "M93056, class A, 20 probes, 20 in M93056 859-1273, Human mononcyte/neutrophil elastase inhibitor mRNA sequence" "M93221, class A, 20 probes, 20 in M93221mRNA 4618-5110, Human macrophage mannose receptor (MRC1) gene" "S78569, class A, 20 probes, 20 in S78569 5723-6161, laminin alpha 4 chain [human, fetal lung, mRNA, 6204 nt]" M83667\_mal\_s\_at "M83667, class A, 20 probes, 20 in M83667mRNA 713-1143, Human NF-IL6-beta protein mRNA, complete cds" "S59049, class A, 20 probes, 20 in S59049 786-1314, BL34=B cell activation gene [human, mRNA, 1398 nt]" "M83822, class A, 20 probes, 20 in M83822 6791-7253, Human beige-like protein (BGL) mRNA, partial cds" "M86699, class A, 20 probes, 20 in M86699 3355-3787, Human kinase (TTK) mRNA, complete cds" "M88458, class A, 20 probes, 20 in M88458 585-1095, Human ELP-1 mRNA sequence" determining regions mRNA, complete cds" (GA733-2) mRNA" mRNA, 2304 nt]" M98447\_mal\_at M98776 mal\_at M97935 s at S54005\_s\_at M87789 s at S78187\_at S78569\_at M88458\_at M93036\_at M93221\_at M93426\_at M97936\_at S69232\_at S73591\_at S45630\_at S74728\_at M83822\_at M86699\_at M93056\_at M96740 at S62539\_at S67156\_at S68805\_at S74017 at S59049\_at 2704 nt]"

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"S82597, class A, 20 probes, 20 in S82597mRNA 9-507, Description: UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase gene extracted from

"U02020, class C, 20 probes, 20 in all\_U02020 1985-2352, Human pre-B cell enhancing factor (PBEF) mRNA, complete cds"

"U02556, class A, 20 probes, 20 in U02556 1579-2101, Human RP3 mRNA, complete cds" "U03272, class A, 20 probes, 20 in U03272 9619-10081, Human fibrillin-2 mRNA, complete cds"

UDP-GaINAc:polypeptide N-acetylgalactosaminyltransferase/GalNAc-transferase {3' region, exon 11} [human, placent"

S82597 mal\_s\_at

U02020\_at J02556\_at U03272\_at U04898\_at J05861\_at

"U04898, class A, 20 probes, 20 in U04898 1421-1877, Human orphan hormone nuclear receptor RORalpha2 mRNA, complete cds"

"U05861, class B, 20 probes, 15 in U05861 exon 50-243: 5 not in GB record, Human hepatic dihydrodiol dehydrogenase gene"

"U06643, class A, 19 probes, 19 in U06643 71-463, Human keratinocyte lectin 14 (HKL-14) mRNA, complete cds."

J06643 s at

U07919 at

U09278\_at U09578\_at

"U07919, class A, 20 probes, 20 in U07919 2973-3399, Human aldehyde dehydrogenase 6 mRNA, complete cds"

"U09278, class A, 20 probes, 20 in U09278 2285-2735, Human fibroblast activation protein mRNA, complete cds" "U09578, class A, 20 probes, 20 in U09578 2012-2456, Human MAPKAP kinase (3pK) mRNA, complete cds"

# ngschis .clevo:

"U09770, class A, 20 probes, 20 in U09770 61-391, Human cysteine-rich heart protein (hCRHP) mRNA, complete cds"

J09770 at

"U37518, class A, 20 probes, 20 in U37518 1162-1390, Human TNF-related apoptosis inducing ligand TRAIL mRNA, complete cds"
"U37519, class A, 20 probes, 20 in U37519 2304-2784, Human aldehyde dehydrogenase (ALDH8) mRNA, complete cds"
"U38545, class A, 20 probes, 20 in U38545 3056-3578, Human ARF-activated phosphatidylcholine-specific phospholipase D1a (hPLD1) mRNA, complete "U27333, class C, 9 probes, 9 in all U27333 2701-2753, Human alpha (1,3) fucosyltransferase (FUT6) mRNA, major transcript I, complete cds, Human "U15932, class A, 20 probes, 20 in U15932 1928-2294, Human dual-specificity protein phosphatase mRNA, complete cds"
"U16306, class A, 20 probes, 20 in U16306 10722-11142, Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, U31201\_cds2\_s\_at "U31201, class A, 20 probes, 20 in U31201mRNA 4592-5106, Human laminin gamma2 chain gene (LAMC2), Human laminin gamma2 chain gene "U26312, class A, 20 probes, 20 in U26312 166-686, Human heterochromatin protein HP1Hs-gamma mRNA, complete cds"
"U27326, class A, 20 probes, 20 in U27326 1666-2123, Human alpha (1,3/1,4) fucosyltransferase (FUT3) mRNA, major transcript I, complete cds" "U23942, class A, 20 probes, 20 in U23942 2811-3129, Human lanosterol 14-demethylase cytochrome P450 (CYP51) mRNA, complete cds" "U12767, class A, 20 probes, 20 in U12767 4598-4922, Human mitogen induced nuclear orphan receptor (MINOR) mRNA, complete cds" "U34252, class A, 20 probes, 20 in U34252 2177-2579, Human gamma-aminobutyraldehyde dehydrogenase mRNA, complete cds" "U28488, class A, 20 probes, 20 in U28488 1344-1847, Human putative G protein-coupled receptor (AZ3B) mRNA, complete cds" "U20158, class A, 20 probes, 20 in U20158 1551-1911, Human 76 kDa tyrosine phosphoprotein SLP-76 mRNA, complete cds" "U13737, class A, 20 probes, 20 in U13737 2046-2556, Human cysteine protease CPP32 isoform alpha mRNA, complete cds" "U18062, class A, 20 probes, 20 in U18062 1678-2152, Human TFIID subunit TAFI155 (TAFI155) mRNA, complete cds" "U18934, class A, 20 probes, 20 in U18934 4229-4311, Human receptor tyrosine kinase (DTK) mRNA, complete cds" "U14518, class A, 20 probes, 20 in U14518 859-1315, Human centromere protein-A (CENP-A) mRNA, complete cds" "U25182, class A, 20 probes, 20 in U25182 350-860, Human antioxidant enzyme AOE37-2 mRNA, complete cds" "U16799, class A, 20 probes, 20 in U16799 865-1419, Human Na,K-ATPase beta-1 subunit mRNA, complete cds" "U17077, class A, 20 probes, 20 in U17077 1716-2190, Human BENE mRNA, partial cds" "U31556, class A, 20 probes, 20 in U31556 1445-1679, Human transcription factor E2F-5 mRNA, complete cds" "U32849, class A, 20 probes, 20 in U32849 867-1383, Human Hou mRNA, complete cds" "U24577, class A, 20 probes, 20 in U24577 1182-1512, Human LDL-phospholipase A2 mRNA, complete cds" "U14970, class A, 20 probes, 20 in U14970 122-656, Human ribosomal protein S5 mRNA, complete cds" "U20758, class A, 20 probes, 20 in U20758mRNA 885-1437, Human osteopontin gene, complete cds" "U21128, class A, 20 probes, 20 in U21128 1254-1632, Human lumican mRNA, complete cds" "U24166, class A, 20 probes, 20 in U24166 2107-2395, Human EB1 mRNA, complete cds" alpha (1,3) fucosyltransferase (FUT6) mRNA, major transcript I, complete cds" U20758 rnal at U27326\_s\_at U27333 s at U26312 s at complete cds" U16799 s\_at U17077\_at U18062\_at U18934\_at U20158\_at U31556\_at U32849 at U34252 at U24166\_at J24577\_at J25182 at (LAMC2)" U21128 at U23942\_at U15932 at U16306 at U14518 at U14970 at J12767\_at U13737\_at

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"U39318, class A, 20 probes, 20 in U39318 159-675, Human E2 ubiquitin conjugating enzyme UbcH5C (UBCH5C) mRNA, complete cds"
"U40622, class A, 20 probes, 20 in U40622 999-1449, Human XRCC4 mRNA, complete cds"
"U41060, class A, 20 probes, 20 in U41060 2936-3416, Human breast cancer, estrogen regulated LIV-1 protein (LIV-1) mRNA, partial cds"
"U43944, class A, 20 probes, 20 in U43944 1705-1978, Human breast cancer cytosolic NADP(+)-dependent malic enzyme mRNA, partial cds"
"U46499, class C, 20 probes, 20 not in GB record, Human microsomal glutathione transferase (GST12) gene, 5' sequence"
"U46689, class A, 20 probes, 20 in U46699 3317-3863, Human microsomal aldehyde dehydrogenase (ALD10) mRNA, complete cds"
"U46692, class A, 20 probes, 20 in U46692mRNA 84-480, Human cystatin B gene, complete cds" U48705\_mal\_s\_at "U48705, class A, 20 probes, 20 in U48705mRNA 3326-3867, Human receptor tyrosine kinase DDR gene, complete cds" U49114\_at "U49114, class A, 20 probes, 20 in U49114 2196-2700, Human prohormone convertase 5 precursor (PC5) mRNA, partial cds" U43944\_at U46689 at U40622\_at U41060\_at U46499\_at

J37518 at U37519\_at U38545\_at U39318\_at

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"U50648, class A, 20 probes, 20 in U50648mRNA 2211-2751, Human interferon-inducible RNA-dependent protein kinase (Pkr) gene"

"U53446, class A, 20 probes, 20 in U53446 2680-3220, Human mitogen-responsive phosphoprotein DOC-2 mRNA, complete cds"

J53446\_at

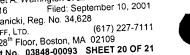
ants: Janet A. Warrington et al. i: 09/950,016 Filed: September 10, 2001 John P. Iwanicki, Reg. No. 34,628 Applicants: USSN: 09/950,016 NER & WITCOFF, LTD. (617) 227-7111 State Street, 28<sup>th</sup> Floor, Boston, MA 02109 Attorney Docket No. 03848-00093 SHEET 18 OF 21

"U90546, class B, 12 probes, 12 in U90546 1301-1344, Human butyrophilin (BTF4) mRNA, complete cds, Human butyrophilin (BTF4) mRNA, complete "X02419, class A, 20 probes, 20 in X02419mRNA 1754-2210, H.sapiens uPA gene"
"X02530, class C, 20 probes, 20 in all\_X02530 571-1118, Human mRNA for gamma-interferon inducible early response gene (with homology to platelet "U55206, class A, 20 probes, 18 in U55206 790-1222. 2 not in GB record, Human gamma-glutamyl hydrolase (hGH) mRNA, complete cds" "U90902, class A, 20 probes, 20 in U90902 939-1407, Human clone 23612 mRNA sequence"
"U90904, class A, 20 probes, 20 in U90904 1102-1342, Human clone 23773 mRNA sequence"
"U96915, class A, 20 probes, 20 in U96915 165-693, Homo sapiens sin3 associated polypeptide p18 (SAP18) mRNA, complete cds."
"V00536, class A, 20 probes, 20 in V00536mRNA 811-1135, IFNG gene extracted from Human immune interferon (IFN-gamma) gene"
"V00563, class A, 20 probes, 20 in V00563mRNA 19-127, Human gene for immunoglobulin mu, part of exon 8." "U82130, class A, 20 probes, 20 in U82130 1151-1451, Human tumor susceptiblity protein (TSG101) mRNÁ, complete cds"
"U83115, class A, 20 probes, 20 in U83115 6327-6753, Human non-lens beta gamma-crystallin like protein (AIM1) mRNA, partial cds" "U84573, class A, 20 probes, 20 in U84573 2882-3422, Homo sapiens lysyl hydroxylase isoform 2 (PLOD2) mRNA, complete cds" "U78525, class A, 20 probes, 20 in U78525 2480-2942, Human eukaryotic translation initiation factor (eIF3) mRNA, complete cds" "U77604, class A, 20 probes, 20 in U77604 13-493, Human microsomal glutathione S-transferase (GST-II) mRNA, complete cds" "U85707, class A, 20 probes, 20 in U85707 1922-2426, Human leukemogenic homolog protein (MEIS1) mRNA, complete cds" "U67784, class A, 20 probes, 20 in U67784 1106-1640, Human orphan G protein-coupled receptor (RDC1) mRNA, partial cds" "U89942, class A, 20 probes, 20 in U89942 2867-3383, Human Iysyl oxidase-related protein (WS9-14) mRNA, complete cds" "U63743, class A, 20 probes, 20 in U63743 2187-2715, Human mitotic centromere-associated kinesin mRNA, complete cds." "U65932, class A, 20 probes, 20 in U65932 1244-1634, Human extracellular matrix protein 1 (ECM1) mRNA, complete cds" "U73960, class A, 20 probes, 20 in U73960 566-1022, Human ADP-ribosylation factor-like protein 4 mRNA, complete cds" "U60808, class A, 20 probes, 20 in U60808 1423-2000, Human CDP-diacylglycerol synthase (CDS) mRNA, complete cds." "U67963; class A, 20 probes, 20 in U67963 590-1148, Human Iysophospholipase homolog (HU-K5) mRNA, complete cds" "U68142, class A, 20 probes, 20 in U68142 1372-1900, Human RalGDS-like 2 (RGL2) mRNA, partial cds" "U59877, class A, 20 probes, 20 in U59877 295-750, Human low-Mr GTP-binding protein (RAB31) mRNA, complete cds" "U60115, class A, 20 probes, 20 in U60115 1863-2211, Human skeletal muscle LIM-protein SLIM1 mRNA, complete cds" "U56814, class A, 20 probes, 20 in U56814 495-957, Human DNAse I homologous protein (DHP2) mRNA, complete cds" "U67122, class A, 20 probes, 20 in U67122 469-728, Human ubiquitin-related protein SUMO-1 mRNA, complete cds." "U53506, class A, 20 probes, 20 in U53506 1344-1836, Human type II iodothyronine deiodinase mRNA, complete cds. "U69961, class A, 20 probes, 20 in U69961 1565-1997, Human solurshin (RGS) mRNA, complete cds" "U71207, class A, 20 probes, 20 in U71207 1846-2224, Human eyes absent homolog (Eab1) mRNA, complete cds." "U72621, class A, 20 probes, 20 in U72621 2581-3145, Human LOT1 mRNA, complete cds." "U73377, class A, 20 probes, 20 in U73377 3059-3363, Human p66shc (SHC) mRNA, complete cds." "U85658, class A, 20 probes, 20 in U85658 2310-2736, Human transcription factor ERF-1 mRNA, complete cds" "U57721, class A, 20 probes, 20 in U57721 1126-1588, Human L-kynurenine hydrolase mRNA, complete cds" "U62800, class A, 20 probes, 20 in U62800 181-535, Human cystatin M (ČŠT6) mRŇA, complete cds" "X01060, class C, 20 probes, 20 in all\_X01060 4427-4986, Human mRNA for transferrin receptor" "U88964, class A, 20 probes, 20 in U88964 130-568, Human HEM45 mRNA, complete cds." "U60060, class A, 20 probes, 20 in U60060 1090-1540, Human FEZ1 mRNA, complete cds" X02419\_mal\_s\_at X02530\_at ta\_ V00536 mal U60808\_s\_at U62800\_at U63743\_at U65932\_at U67122\_s\_at U59877\_s\_at V00563\_at U67784\_at U67963\_at J96915 at X01060 at U60060\_at U71207\_at U72621\_at J90546\_at J90902 at J90904 at U85707\_at J88964 at U78525\_at J82130\_at U83115\_at U84573 at U85658\_at J89942 at J60115\_at U68142\_at U69961\_at U73377 at U73960\_at U77604\_at J57721\_at proteins)" J55206 at J56814\_at U53506 at

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X02761, class C, 20 probes, 20 in all\_X02761 7082-7646, Human mRNA for fibronectin (FN precursor)"

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Attorney Docket No. 03848-00093 SHEET 19 OF 21 "X51441, class C, 8 probes, 8 in all\_X51441 55-90, Human mRNA for serum amyloid A (SAA) protein partial, clone pAS3-alpha, Human mRNA for serum "X14813, class C, 20 probes, 20 in all\_X14813 1077-1618, Human liver mRNA for 3-oxoacyl-CoA thiolase"
"X15183, class C, 20 probes, 20 in all\_X15183 2479-2894, Human mRNA for 90-kDa heat-shock protein"
"X15183, class C, 20 probes, 20 in all\_X15187cds 2089-2380: 10 in reverseSequence, 2521-2737, Human tral mRNA for human homologue of murine tumor "X15414, class C, 20 probes, 20 in all\_X15414 844-1349, Human mRNA for aldose reductase (EC 1.1.1.2)"
"X16354, class C, 20 probes, 20 in all\_X16354 2895-3400, Human mRNA for transmembrane carcinoembryonic antigen BGPa (formerly TM1-CEA)"
"X16396, class C, 20 probes, 20 in all\_X16396 1543-2102, Human mRNA for NAD-dependent methylene tetrahydrofolate dehydrogenase cyclohydrolase "X51441, class B, 12 probes, 11 in X51441cds 28-65: 1 in reverseSequence, 228, Human mRNA for serum amyloid A (SAA) protein partial, clone pAS3-"X02875, class C, 20 probes, 20 in all\_X02875 158-628, Human mRNA (3' -fragment) for (2' -5') oligo Á synthetase E (1,8 kb RNA)"
"X04470, class B, 19 probes, 15 in X04470cds 24-374: 4 in reverseSequence, 408-495, Human mRNA for antileukoprotease (ALP) from cervix uterus" "X12451, class A, 20 probes, 20 in X12451mRNA 974-1496, Human mrRNA for pro-cathepsin L (major excreted protein MEP)"
"X13794, class A, 20 probes, 20 in X13794mRNA 713-1229, H.sapiens lactate dehydrogenase B gene exon 1 and 2 (EC 1.1.1.27) (and joined CDS)"
"X13839, class C, 20 probes, 20 in all\_X13839 768-1300, Human mRNA for vascular smooth muscle alpha-actin" "X06948, class B, 20 probes, 12 in X06948cds 482-680: 8 in reverseSequence, 918-1146, Human mRNA for high affinity IgE receptor alpha-subunit "X07109, class C, 20 probes, 20 in all X07109 2732-3303, Human mRNA for protein kinase C (PKC) type beta II"
"X07438, class A, 19 probes, 19 in X07438exon#2 11-166, Human DNA for cellular retinol binding protein (CRBP) exons 3 and 4 /gb=X07438 "X54489, class A, 20 probes, 20 in X54489mRNA 660-1034, Human gene for melanoma growth stimulatory activity (MGSA)" "X54867, class A, 20 probes, 20 in X54867mRNA 783-1293, Human mRNA for NKG2-A gene" "X04602, class C, 20 probes, 20 in all X04602 920-1086, Human mRNA for interleukin BSF-2 (B-cell differentiation factor)"
"X05232, class C, 20 probes, 20 in all X05232 1530-1771, Human mRNA for stromelysin"
"X05610, class C, 20 probes, 20 in all X05610 1701-2098, Human mRNA for type IV collagen alpha -2 chain"
"X06700, class C, 20 probes, 20 in all X06700 1946-2466, Human mRNA 3' region for pro-alpha1(III) collagen" "X07834, class C, 20 probes, 20 in all\_X07834 515-1026, Human mRNA for manganese superoxide dismutase (EC 1.15.1.1)" "X16662, class C, 20 probes, 20 in all\_X16662 1399-1916, Human mRNA for vascular anticoagulant-beta (VAC-beta)" "X17042, class C, 20 probes, 20 in all\_X17042 689-1158, Human mRNA for hematopoetic proteoglycan core protein" "X51408, class C, 20 probes, 20 in all\_X51408 1626-2017, Human mRNA for n-chimaerin" "X51420, class C, 20 probes, 20 in all\_X51420 2264-2781, Human mRNA for tyrosinase-related protein" "X07695, class C, 20 probes, 20 in all\_X07695 1175-1722, Human mRNA for cytokeratin 4 C-terminal region" "X07696, class C, 20 probes, 20 in all\_X07696 1300-1685, Human mRNA for cytokeratin 15" "X51521, class C, 20 probes, 20 in all\_X51521 2653-3026, Human mRNA for ezrin"
"X51801, class C, 20 probes, 20 in all\_X51801 1415-1824, Human OP-1 mRNA for osteogenic protein"
"X52022, class A, 20 probes, 20 in X52022 9941-10349, H.sapiens RNA for type VI collagen alpha3 chain"
"X52426, class C, 20 probes, 20 in all\_X52426 1139-1665, H.sapiens mRNA for cytokeratin 13"
"X53296, class C, 20 probes, 20 in all\_X53296 1099-1657, H.sapiens mRNA for IRAP" "X14008, class A, 20 probes, 20 in X14008mRNA 926-1433, Human lysozyme gene (EC 3.2.1.17)" alpha, Human mRNA for serum amyloid A (SAA) protein partial, clone pAS3-alpha" amyloid A (SAA) protein partial, clone pAS3-alpha" 'ntype=DNA /annot=exon" X13839\_at X14008\_ma1\_f\_at X12451\_at X13794\_rna1\_at X54489 rnal at rejection antigen (EC 1.5.1.15)" X54867\_s\_at X52426\_s\_at X53296\_s\_at X51441 s at X06700\_s\_at X06948\_at X16662\_at X17042\_at X51408\_at X02875\_s\_at X04470\_s\_at X04602 s at X07438 s at X51801\_at X07695\_at X07696\_at X07834\_at X51441\_at X51521\_at X52022 at X51420\_at X14813 at X15183 at X15187\_at X15414 at X16354\_at X16396 at X05610 at X07109 at X05232 at (FcERI)"



"X76732, class B, 20 probes, 12 in X76732cds 975-1221: 6 in reverseSequence, 1464-1518: 2 not in GB record, H.sapiens NEFA protein mRNA, complete "X85116, class C, 20 probes, 20 not in GB record, H.sapiens epb72 gene exon 1"
"X85750, class C, 20 probes, 20 in all X85750 1935-2500, H.sapiens mRNA for transcript associated with monocyte to macrophage differentiation"
"X877212, class C, 20 probes, 20 in all X87212 1273-1772, H.sapiens mRNA for cathepsin C" "X65965, class A, 18 probes, 18 in X65965exon#1-2 32-94, H.sapiens SOD-2 gene for manganese superoxide dismutase. /gb=X65965 /ntype=DNA "X67098, class A, 20 probes, 20 in X67098exon#8 40-454, H.sapiens rTS alpha mRNA containing four open reading frames"
"X67951, class B, 20 probes, 10 in X67951cds 312-576: 10 in reverseSequence, 642-888, H.sapiens mRNA for proliferation-associated gene (pag)"
"X67951, class B, 20 probes, 20 in all X68277 1459-1952, H.sapiens CL 100 mRNA for protein tyrosine phosphatase" "X65614, class B, 20 probes, 10 in X65614cds 10-262: 10 in reverseSequence, 19-391, H.sapiens mRNA for calcium-binding protein S100P" "X77584, class B, 20 probes, 14 in X77584cds 5-215: 6 in reverseSequence, 43-481, H.sapiens mRNA for ATL-derived factor/thiredoxin"
"X78549, class C, 20 probes, 20 in all X78549 1912-2186, H.sapiens brk mRNA for tyrosine kinase"
"X78565, class C, 20 probes, 20 in all X78565 6971-7512, H.sapiens mRNA for tenascin-C, 7560bp"
"X78932, class C, 20 probes, 20 in all X78932 421-976, H.sapiens HZF9 mRNA for zinc finger protein"
"X789153, class C, 20 probes, 20 in all X82153 1128-1615, H.sapiens mRNA for cathepsin O" "X57579, class A, 20 probes, 18 in X57579exon 545-840. 2 in reverseSequence, 1392-1555, H.sapiens activin beta-A subunit (exon 2)" "X59770, class A, 20 probes, 20 in X59770mRNA 685-1213, H.sapiens IL-1R2 mRNA for type II interleukin-1 receptor, (cell line CB23)" "X61970, class A, 20 probes, 17 in X61970cds 299-677: 3 in reverseSequence, 758-860, H.sapiens mRNA for macropain subunit zeta" "X91911, class A, 20 probes, 18 in X91911cds 321-711: 2 in reverseSequence, 912-950, H.sapiens mRNA for RTVP-1 protein" "X76180, class C, 20 probes, 20 in all\_X76180 2760-3115, H.sapiens mRNA for lung amiloride sensitive Na+ channel protein" "X76029, class B, 20 probes, 14 in X76029cds 141-453: 6 in reverseSequence, 636-756, H.sapiens mRNA for neuromedin U" "X69141, class C, 20 probes, 20 in all\_X69141 1444-1997, H. sapiens mRNA for squalene synthase"
"X70476, class A, 20 probes, 20 in X70476mRNA 2526-3024, H. sapiens subunit of coatomer complex"
"X75252, class C, 20 probes, 20 in all\_X75252 1083-1408, H. sapiens phosphatidylethanolamine binding protein mRNA" "X66534, class C, 20 probes, 20 in all\_X66534 2622-2953, H.sapiens soluble guanylate cyclase large subunit mRNA" "X59892, class C, 20 probes, 20 in all X59892 2163-2542, H.sapiens mRNA for IFN-inducible gamma2 protein" "X61123, class A, 20 probes, 20 in X61123mRNA 1212-1608, Human BTG1 mRNA" "X54941, class C, 20 probes, 20 in all\_X54941 194-687, H.sapiens ckshs1 mRNA for Cks1 protein homologue" X54925, class C, 20 probes, 20 in all\_X54925 1537-1904, H.sapiens mRNA for type I interstitial collagenase" "X56654, class A, 20 probes, 20 in X56654mRNA 3221-3641, Human DSG1 mRNA for desmoglein type 1" "X68742, class C, 20 probes, 20 in all\_X68742 2942-3423, H.sapiens mRNA for integrin, alpha subunit" "X87241, class C, 20 probes, 20 in all X87241 14353-14738, H.sapiens mRNA for hFat protein" leucine zipper protein, calcium-binding EF-hand protein, from acute lymphoblastic leukemia ce" "X82693, class C, 20 probes, 20 in all X82693 134-681, H.sapiens mRNA for E48 antigen" "X76648, class C, 20 probes, 20 in all\_X76648 338-777, H.sapiens mRNA for glutaredoxin" "X63629, class C, 20 probes, 20 in all\_X63629 2582-3126, H.sapiens mRNA for p cadherin" "X76223, class A, 20 probes, 20 in X76223exon 2-540, H.sapiens MAL gene exon 4." "X76342, class C, 20 probes, 20 in all X76342 1484-2019, H.sapiens ADH7 mRNA" "X76534, class C, 20 probes, 20 in all X76534 2145-2614, H.sapiens NMB mRNA" "X82200, class C, 20 probes, 20 in all X82200 2236-2801, H.sapiens Staf50 mRNA" "X57522, class C, 20 probes, 20 in all\_X57522 2229-2788, H.sapiens RING4 cDNA" "X64707, class C, 20 probes, 20 in all\_X64707 401-888, H.sapiens BBC1 mRNA" cds (DNA-binding X85116 mal X76223 s at X85750\_at X87212\_at X76534\_at X76648\_at X78932\_at X82153 at X82200 at X82693 at /annot=exon" X78549\_at X78565\_at X65965\_s\_at X76180\_at X77584 at X68742\_at X69141\_at X76342 at X76732 at x57579\_s\_at X67098\_at X67951\_at X75252\_at X76029\_at X64707\_at X65614\_at X70476\_at X66534\_at X68277 at X59892\_at X61123\_at x61970\_at X63629\_at x59770\_at x57522\_at X54941\_at X56654 at X54925 at

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